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Claims:

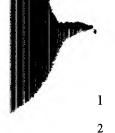
1	1.	A method for maintaining a connection between a server and a				
2	client comprising the steps of:					
3		receiving a message;				
4		determining whether to store one or more elements of the				
5	message;					
6		storing the one or more elements of the message when the one or				
7	more elements of the message are to be stored;					
8		transmitting the message; and				
9		determining whether the server has failed and when the server has				
10	failed, restoring the server to a pre-failure connection state using the one or more					
11	stored message elements.					
1	2.	The method as recited in claim 1, further comprising the steps of:				
2		determining whether to delay the message; and				
3		delaying the transmission of the message until one or more				
4	conditions a	tions are satisfied when the message is to be delayed				
1	3.	The method as recited in claim 2, wherein the one or more				
2	conditions comprises successful storage of the one or more elements of the					
3	message.					
1	4.	The method as recited in claim 1, further comprising the steps of:				
2		determining whether to discard the message;				
3		discarding the message when the message is to be discarded; and				
4		wherein the message is not transmitted when the message is to be				
5	discarded.					
1	5.	The method as recited in claim 1, further comprising the steps of:				
2		determining whether to modify the message; and				

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- modifying one or more elements of the message when the message is to be modified.
- The method as recited in claim 1, wherein the step of restoring the application to a pre-failure connection state using the one or more stored message elements further comprises periodically transmitting an outgoing message to maintain the connection until the application is restored.
- 7. The method as recited in claim 1, further comprising the step of periodically storing a current state of the server and discarding any stored elements that are no longer needed to restore the server to the current state.
- The method as recited in claim 1, wherein the message is a protocol segment.
- 9. The method as recited in claim 1, wherein the message conforms to the Transmission Control Protocol (TCP) standard.
 - **10.** The method as recited in claim **1**, wherein the one or more elements are stored in a log server
- 1 11. The method as recited in claim 10, wherein the log server is remotely located from the server.
- 1 **12.** The system as recited in claim 1, wherein the one or more elements are stored in a stable memory in the server.
- 1 **13.** The method as recited in claim **1**, wherein the one or more elements are stored in a secondary server.
- 1 14. The method of claim 1, further including the step of periodically transmitting, when said server has failed, an outgoing message to the client to maintain the connection until the server is restored.



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a server computer having a process layer, a protocol layer coupled to the process layer through a first wrapper, and a network interface coupled to the protocol layer through a second wrapper;

a log server coupled to the first wrapper and the second wrapper; 5 one or more client computers; and 6

one or more network connections between the one or more client computers and the network interface of the server computer.

- The system as recited in claim 15, wherein the first wrapper is 16. interposed in a first interface between the process layer and the protocol layer, and the second wrapper is interposed in a second interface between the protocol layer and the network interface.
- The system as recited in claim 15, wherein the first wrapper and the 17. 1 second wrapper are interposed in the protocol layer.
 - The system as recited in claim 15, wherein the first wrapper and 18. second wrapper are capable of receiving a message, determining whether to store one or more elements of the message, storing the one or more elements of the message in the log server when the one or more elements of the message are to be stored, transmitting the message, and determining whether the server has failed and when the server has failed, restoring the server to a pre-failure connection state using the one or more stored message elements.
- The system as recited in claim 18, wherein the first wrapper and 19. 1 second wrapper are further capable of determining whether to delay the 2 message, and delaying the transmission of the message until one or more 3 conditions are satisfied when the message is to be delayed. 4

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- **20.** The system as recited in claim **19**, wherein the one or more conditions comprises successful storage of the one or more elements of the message.
- 21. The system as recited in claim 18, wherein the first wrapper and second wrapper are further capable of determining whether to discard the message, discarding the message when the message is to be discarded, and not transmitting the message when the message is to be discarded.
- The system as recited in claim 18, wherein the first wrapper and second wrapper are further capable of determining whether to modify the message, modifying one or more elements of the message when the message is to be modified.
 - **23.** The system as recited in claim **18**, wherein the second wrapper is further capable of periodically transmitting an outgoing message to maintain the connection until the application is restored.
 - **24.** The system as recited in claim **18**, wherein the first wrapper and second wrapper are further capable of periodically storing a current state of the server and discarding any stored elements that are no longer needed to restore the server to the current state.
- 25. The system as recited in claim 18, wherein the message is a protocol segment.
- 26. The system as recited in claim 18, wherein the message conforms to the Transmission Control Protocol (TCP) standard.
- The system as recited in claim **15**, wherein the log server is remotely located from the server.
 - **28.** The system as recited in claim **15**, wherein the log server is a stable memory in the server.

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- 1 **29.** The system as recited in claim **15**, wherein the log server is a
- 2 secondary server.